# 45-DAY EXPRESS TERMS FOR PROPOSED BUILDING STANDARDS OF THE OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

## REGARDING PROPOSED CHANGES TO 2010 CALIFORNIA ADMINISTRATIVE CODE AND 2010 CALIFORNIA BUILDING CODE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PARTS 1 & 2, STRUCTURAL

#### LEGEND FOR EXPRESS TERMS

- 1. Existing California amendments or code language being modified: Modified language is underlined.
- 2. Repealed text: All such language appears in strikeout.

#### **EXPRESS TERMS**

#### 2010 CALIFORNIA ADMINISTRATIVE CODE

## CHAPTER 6 SEISMIC EVALUATION PROCEDURES FOR HOSPITAL BUILDINGS

## ARTICLE 1 DEFINITIONS AND REQUIREMENTS

**1.0 Scope.** The regulations in this article shall apply to the administrative procedures necessary to implement the seismic retrofit requirements of the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983.

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#### 1.5.2 Delay in Compliance.

1. The Office may grant the hospital owner an extension to the January 1, 2008 seismic compliance deadline for both structural and nonstructural requirements if compliance will result in diminished health care capacity which cannot be provided by other general acute care hospitals within a reasonable proximity.

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- 2. Any general acute care hospital located in Seismic Design Category D, as defined by Section 1613A of the 2010 California Building Code may request an exemption from the anchorage and bracing requirements of NPC 3 for a hospital building if all the following conditions are met:
  - 2.1 The hospital building shall meet the anchorage and bracing requirements for NPC 2.

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- 2.2 Any future upgrade of building(s) to SPC 5 shall be accompanied by upgrade of nonstructural components to either NPC 4 or NPC 5.
- 2.3 By January 1, 2024, the hospital owner shall submit to the Office a complete nonstructural evaluation up to NPC 5, for each building.
- 2.4 By January 1, 2026, the hospital owner shall submit to the Office construction documents for NPC 5 compliance that are deemed ready for review by the Office, for each building.
- 2.5 By January 1, 2028, the hospital owner shall obtain a building permit to begin construction, for NPC 5 compliance of each building that the owner intends to use as a general acute care hospital building after January 1, 2030. Hospitals not meeting the January 1, 2028, deadline set by this section shall not be issued a building permit for any noncompliant building except those required for seismic compliance in accordance with the California Administrative Code (Chapter 6), maintenance, and emergency repairs until the building permit required by this section is issued.

Exception: If hospital has obtained building permit(s) for project(s) to relocate all general acute care hospital beds to SPC 3 or higher, and NPC 5 building(s) by January 1, 2030, requirements of Sections 1.5.2.2.3 through 1.5.2.2.5 shall be deemed to be satisfied.

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- 7. Any general acute care hospital (buildings located in Seismic Design Category D or F) may request an extension from the anchorage and bracing requirements of NPC 3 up to January 1, 2020, if all of the following conditions are met:
  - 7.1 The hospital shall meet the anchorage and bracing requirements for NPC 2.
  - 7.2 All building(s) shall be upgraded to either NPC 4 or NPC 5 by January 1, 2020.
  - 7.3 By January 1, 2014, the hospital owner shall submit to the Office a complete nonstructural evaluation up to NPC 5, for each building.
  - 7.4 By January 1, 2016, the hospital owner shall submit to the Office construction documents for NPC 4 or NPC 5 compliance that are deemed ready for review by the Office, for each building.
  - 7.5 By January 1, 2018, the hospital owner shall obtain a building permit to begin construction, for NPC 4 or NPC 5 compliance of each building that the owner intends to use as general acute care hospital building after January 1, 2020. Hospitals not meeting the January 1, 2018, deadline set by this section shall not be issued a building permit for any noncompliant building except those required for seismic compliance in accordance with the California Administrative Code (Chapter 6), maintenance, and emergency repairs until the building permit required by this section is issued.

Exception: If hospital has obtained building permit(s) for project(s) to relocate all general acute care hospital beds to SPC 3 or higher, and NPC 5 building(s) by January 1, 2020, requirements of Sections 1.5.2.7.3 through 1.5.2.7.5 shall be deemed to be satisfied.

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#### **NOTATION:**

- Authority: Health and Safety Code Section 130005(g) & 130021
- Reference: Health and Safety Code Section 1275, 129850 & 130005(g)

## ARTICLE 3 APPROVAL OF CONSTRUCTION DOCUMENTS

#### 7-113. Application for Plan, Report or Seismic Compliance Extension Review.

(a) Except as otherwise provided in this part, before commencing construction or alteration of any health facility, the governing board or authority thereof shall submit an application for plan review to the Office, and shall obtain the written approval thereof by the Office describing the scope of work included and any special conditions under which approval is given.

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#### **NOTATION:**

- Authority: Health and Safety Code Section 130005(g), 130021, & 129895
- Reference: Health and Safety Code Section 1275, 129850, & 130005(g)

#### 2010 CALIFORNIA BUILDING CODE

#### CHAPTER 10 MEANS OF EGRESS

#### SECTION 1003 GENERAL MEANS OF EGRESS

**1003.1 Applicability.** The general requirements specified in Sections 1003 through 1013 shall apply to all three elements of the means of egress system, in addition to those specific requirements for the exit access, the exit and the exit discharge detailed elsewhere in this chapter.

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1003.1.1 Means of egress for hospitals, skilled nursing facilities, and intermediate care facilities. [OSHPD 1 & 4-2] See Section 3417A.

In addition to meeting the requirements of this chapter, means of egress for acute care hospitals, skilled nursing facilities and intermediate care facilities shall comply with the requirements of Sections 1003.1.1.1 and 1003.1.1.2.

Exception: The enforcing agency may exempt minor additions, minor alterations, and minor remodel projects from these requirements.

1003.1.1.1 Means of egress for hospital buildings. [OSHPD 1] Means of egress for hospital buildings shall comply with the requirements of Sections 1003.1.1.1.1 through 1003.1.1.1.6

1003.1.1.1.1 New and existing conforming hospital buildings. Means of egress for new hospital buildings and additions to existing conforming hospital buildings shall only pass through buildings that comply with the requirements of SPC-3 or higher and NPC-4 or higher.

1003.1.1.1.2 Existing SPC-2 hospital buildings. Means of egress for additions to existing SPC-2 hospital buildings shall only pass through hospital buildings that have OSHPD approved performance categories of SPC-2 or higher and NPC-4 or higher.

Exception: The means of egress may pass through hospital buildings that have OSHPD-approved performance categories of SPC-2 or higher and NPC-2 or higher, provided the nonstructural components in the path of egress are braced in accordance with the requirements of ASCE 7, Chapter 13 as modified by Section 1615A.

1003.1.1.1.3 Existing SPC-3 or higher hospital buildings. Means of egress for remodels of existing SPC-3 or higher hospital buildings shall only pass through hospital buildings that have OSHPD approved performance categories of SPC-2 or higher and NPC-4 or higher

**Exception:** The means of egress may pass through hospital buildings that have OSHPD approved performance categories of SPC-2 or higher and NPC-2 or higher, provided the nonstructural components in the path of egress are braced in accordance with the requirements of ASCE 7, Chapter 13 as modified by Section 1615A.

1003.1.1.1.4 Existing SPC-1 and SPC-2 hospital buildings. Means of egress for remodels of existing SPC-1 and SPC-2 hospital buildings shall only pass through hospital buildings that have OSHPD-approved performance categories of SPC-1 or higher and NPC-2 or higher.

**Exception:** Means of egress for acute care service spaces for hospitals licensed pursuant to subdivision (a) of Section 1250 of the Health and Safety Code shall comply with the requirements of Section 1003.1.1.1.2.

1003.1.1.1.5 Other non-conforming-hospital buildings. Hospital buildings that would not otherwise require evaluation for an SPC rating, which are used as a part of the means of egress for acute care hospitals, shall be evaluated in accordance with the requirements of Section 1.3, Chapter 6, Part 1, CCR to determine the appropriate rating, or shall meet the structural requirements of these regulations for conforming hospital buildings. Means of egress shall be in accordance with requirements of Sections 1003.1.1.1.1 through 1003.1.1.1.4.

1003.1.1.1.6 Buildings removed from hospital service. The means of egress for acute care hospitals may pass through buildings that are removed from hospital service only if the buildings remain under the jurisdiction of OSHPD, and only until January 1, 2030, subject to the following:

- Egress for conforming hospital buildings may pass through buildings that have been removed from acute care hospital service that comply with the requirements of Section 1003.1.1.1.1 or 1003.1.1.1.3.
- Egress for nonconforming hospital buildings may pass through buildings that have been removed from acute care hospital service that comply with the requirements of Section 1003.1.1.1.2 or 1003.1.1.1.4.

After January 1, 2030, the means of egress for acute care hospital buildings shall only pass through hospital buildings that have OSHPD-approved performance categories of SPC 3 or higher and NPC 4 or higher.

1003.1.1.2 Means of egress for <u>single-story light frame</u> skilled nursing facilities and intermediate care facilities. [OSHPD 2] Means of egress for <u>single-story light frame</u> skilled nursing facilities and intermediate-care facilities shall comply with the requirements of Sections 1003.1.1.2.1 and 1003.1.1.2.2.

<u>1003.1.1.2.1</u> New facilities or additions to existing facilities. Means of egress for new skilled nursing facilities or intermediate care facilities or additions to existing skilled nursing facilities or intermediate care facilities shall only pass through <u>conforming</u> buildings. that meet the structural requirements of the 1973 or later edition of the California Building Standards Code.

**Exception:** As an alternate, to the section, skilled nursing and intermediate care facilities may meet the egress requirements in Sections <u>3417A.1.1.1.1</u> through <u>1003.1.1.1.5</u> <u>3417A.1.1.1.5</u> for hospital buildings.

<u>1003.1.1.2.2 Jurisdiction.</u> Means of egress for skilled nursing facilities and intermediate-care facilities shall only pass through buildings that are under the jurisdiction of the Office of Statewide Health Planning and Development (OSHPD).

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## CHAPTER 12 INTERIOR ENVIRONMENT

#### SECTION 1224 [OSHPD 1 <u>& 4</u>] HOSPITALS

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#### 1224.4 GENERAL CONSTRUCTION.

#### 1224.4.1 Services/systems and utilities. [OSHPD 1 & 4] See Section 3416A.

Services/systems and utilities that are necessary to the operation of an acute care hospital, skilled nursing facility, intermediate care facility, or correctional treatment center shall meet the structural requirements of this section. Examples of services/systems and utilities include normal power; emergency power; nurse call; fire alarm; communication and data systems; space-heating systems; process load systems; cooling systems; domestic hot and cold water systems; fire-suppression systems; building drain and sewer systems; and medical systems that support basic and supplemental services.

Services from an acute care hospital, skilled nursing facility or correctional treatment center may serve a building that does not comply with the structural requirements of the 1973 edition or later edition of the California Building Standards Code with prior approval of the Office.

Exception: Remodel projects that use available existing services/systems and utilities are exempted from the requirements of this section. The enforcing agency\_may exempt minor addition, minor alteration, and minor remodel projects and projects to upgrade existing services/systems and utilities from the requirements of this section.

#### 1224.4.1.1 Services/systems and utilities for hospital buildings.

1224.4.1.1.1 Additions, alterations, and remodels of conforming (SPC-3, -4, or -5) hospital buildings. Services/systems and utilities for new buildings and additions, and alterations or remodels to existing conforming buildings shall originate in hospital buildings that have OSHPD-approved performance categories of SPC-3 or higher and NPC-4 or higher. The services/systems and utilities shall not pass through or under buildings that do not have OSHPD-approved performance categories of SPC-2 or higher and NPC-4 or higher.

#### Exceptions:

- Remodel and alteration projects that use available existing services/systems and utilities are exempted from those requirements.
- 2. Services/systems and utilities may pass through or under buildings that have OSHPD approved nonstructural performance categories of NPC-2 or NPC-3, provided that the services/systems and utilities feeding the new building addition, alteration, or remodel conform with ASCE 7, Chapter 13 as modified by Section 1615A and are deemed by OSHPD to be free of adverse seismic interactions caused by potential failure of overhead or adjacent components.

#### 1224.4.1.1.2 Additions, alterations, and remodels of SPC-2 hospital buildings.

Services/systems and utilities for additions, alterations, or remodels of SPC-2 hospital buildings may originate in and pass through or under SPC-2 or better buildings that have an OSHPD-approved nonstructural performance category of NPC-3 or higher.

Exception: Services/systems and utilities may pass through or under buildings that have OSHPD-

approved nonstructural performance categories of NPC-2, provided that the services/systems and utilities feeding the addition, alteration, or remodel conform with ASCE 7, Chapter 13 as modified by Section 1615A and are deemed by OSHPD to be free of adverse seismic interactions caused by petential failure of overhead or adjacent components.

- 1224.4.1.1.3 Alterations and remodels of SPC-1 hospital buildings. Services/systems and utilities for alterations or remodels of SPC-1 hospital buildings may originate in and pass through or under SPC-1 or botter buildings that have an OSHPD-approved nonstructural performance category of NPC-2 or higher.
- 1224.4.1.1.4 Buildings without SPC/NPC ratings. When services/systems and utilities for new buildings, additions, alterations, or remodels pass through or under hospital buildings which would not otherwise require evaluation for an SPC rating, such buildings shall be evaluated in accordance with the requirements of Section 1.3, Chapter 6, Part 1, California Administrative Code, to determine the appropriate ratings, or shall be shown to meet the structural requirements of these regulations for new hospital buildings. The services/systems and utilities feeding the new building addition, alteration, or remodel shall conform with ASCE 7, Chapter 13 as modified by Section 1615A and shall be deemed by OSHPD to be free of adverse seismic interactions caused by potential failure of overhead or adjacent components.
- 1224.4.1.1.5 Buildings removed from acute-care hospital service. Services/systems and utilities for conforming acute care hospital buildings may pass through or under a building that has been removed from acute care hospital service until January 1, 2030 if the building removed from service remains under the jurisdiction of OSHPD and meets the performance requirements of Section 1224.4.1.1.1. Services/systems and utilities for nonconforming acute care hospital buildings may pass through or under a building that has been removed from acute care hospital service only if the building removed from service remains under the jurisdiction of OSHPD and meets the performance requirements of Section 1224.4.1.1.2.

Exception: Service/system and utilities for acute care hospital buildings may pass through or under buildings that have been removed from acute care service and which do not meet the performance requirements of Section 1224.4.1.1.1 or Section 1224.4.1.1.2, provided all of the following are met:

- 1. The hospital has obtained an approved extension to the 2008 deadlines in accordance with Section 1.5.2, Article 1, Chapter 6 California Administrative Code.
- 2. The extensions request specifically includes a request to allow services/systems and utilities to pass through or under the building removed from acute care service. The services/systems and utilities may pass through or under the building for the duration of the extension.
- 3. The building removed from acute care service remains under the jurisdiction of OSHPD.

After January 1, 2030, services/systems and utilities for acute care hospital buildings shall not originate in or pass through or under a non-hospital building unless it has OSHPD-approved performance categories of SPC-3 or better and NPC-4 or better, and the non-hospital building remains under the jurisdiction of OSHPD.

- 1224.4.1.2 Services/systems and utilities for skilled nursing facilities, intermediate care facilities, and correctional treatment centers.
  - **1224.4.1.2.1 New buildings and additions.** Services/systems and utilities for new buildings and additions shall not originate in or pass through or under structures that do not comply with the structural requirements of the 1973 edition or later edition of the California Building Standards Code. The structures must be under the jurisdiction of OSHPD.

**Exception:** As an alternate to this section, skilled nursing and intermediate care facilities, and correctional treatment centers may meet the requirements in Section 1224.4.1.1 for hospital buildings.

1224.4.1.2.2 Alterations and remodels. Services/systems and utilities for alterations or remodels of existing

buildings may pass through structures that do not comply with the structural requirements off the 1973 edition or later edition of the California Building Standards Code, provided that the structure is under the jurisdiction of OSHPD, and the new services/systems and utilities passing through the buildings are anchored and braced for seismic forces in accordance with these regulations for new buildings and are free of adverse seismic interactions caused by potential failure of overhead or adjacent components.

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#### CHAPTER 16 STRUCTURAL DESIGN

#### SECTION 1601 GENERAL

**1601.1 Scope.** The provisions of this chapter shall govern the structural design of buildings, structures and portions thereof regulated by this code.

**1601.2 References. [OSHPD 2]** All referenced codes and standards listed in Chapter 35 shall include all the modifications contained in this code to referenced standards. In the event of any discrepancy between this code and a referenced standard, refer to Section 1.1.7.

<u>1601.2</u> <u>1601.3</u> **Enforcement Agency Approval. [OSHPD 2]** In addition to requirements of CCR Title 24, Parts 1 & 2, any aspect of project design, construction, quality assurance, or quality control programs for which this code requires approval by the design professional, are also subject to approval by the enforcement agency.

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#### CHAPTER 16A STRUCTURAL DESIGN

#### SECTION 1601A GENERAL

**1601***A***.1 Scope.** The provisions of this chapter shall govern the structural design of buildings, structures and portions thereof regulated by this code.

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**1601A.2 References.** All referenced codes and standards listed in Chapter 35 shall include all the modifications contained in this code to referenced standards. In the event of any discrepancy between this code and a referenced standard, refer to Section 1.1.7.

<u>1601A.2</u> <u>1601A.3</u> Enforcement Agency Approval. In addition to requirements of California Code of Regulations (C.C.R.) Title 24, Parts 1 & 2, any aspect of project design, construction, quality assurance, or quality control programs for which this code requires approval by the design professional, are also subject to approval by the enforcement agency.

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### SECTION 1603A CONSTRUCTION DOCUMENTS

**1603** A.1 General. Construction documents shall show the size, section and relative locations of structural members with floor levels, column centers and offsets dimensioned. The design loads and other information pertinent to the

structural design required by Sections 1603.1.1 through 1603.1.9 shall be indicated on the construction documents.

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**1603***A***.1.5** Earthquake design data. The following information related to seismic loads shall be shown, regardless of whether seismic loads govern the design of the lateral-force-resisting system of the building:

- 1. Seismic importance factor, *I*, and occupancy category.
- 2. Mapped spectral response accelerations,  $S_S$  and  $S_1$ .
- 3. Site class.
- 4. Spectral response coefficients,  $S_{DS}$  and  $S_{D1}$ .
- 5. Seismic design category.
- 6. Basic seismic-force-resisting system(s).
- 7. Design base shear.
- 8. Seismic response coefficient(s),  $C_S$ .
- 9. Response modification factor(s), R.
- 10. Analysis procedure used.
- 11. Applicable horizontal structural irregularities.
- 12. Applicable vertical structural irregularities.
- 13. Location of base as defined in Section 1613A.2.
- 14. Analysis procedure used.

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#### SECTION 1615A MODIFICATIONS TO ASCE 7

**1615A.1 General.** The text of ASCE 7 shall be modified as indicated in Sections 1615A.1.1 through <del>1615A.1.38</del> 1615A.1.41.

1615A.1.1 ASCE 7, Section 11.1. Modify ASCE 7 Section 11.1 by adding Section 11.1.5 as follows:

11.1.5 Structural Design Criteria. Where ASCE 7 requires design review in Chapters 16, 17, and 18, the ground motion, analysis and design methods, material assumptions and acceptance criteria proposed by the engineer shall be submitted to the enforcement agency in the form of structural design criteria for approval.

[OSHPD 1 & 4] Peer review requirements in Section 3414A shall apply to design reviews required by ASCE 7 Chapters 17 and 18.

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#### 1615A.1.27 ASCE 7, Section 16.2.2. Modify ASCE 7 Section 16.2.2 by adding the following:

Requirements of this section shall be deemed to be satisfied for new buildings using acceptance criteria in Section 16.2.4.2 by the nonlinear modeling parameters in ASCE 41.

#### 1615A.1.28 ASCE 7, Section 16.2.3. Modify ASCE 7 Section 16.2.3 by adding the following:

Requirements of this section shall be deemed to be satisfied by using load combinations in Sections 12.4.2.3 and 12.4.3.2 with 25% of the required live loads.

#### 1615A.1.29 1615A.1.27 ASCE 7, Section 16.2.4. Modify ASCE 7 Section 16.2.4 by the following:

a) Where site is located within 3.1 miles (5 km) of an active fault at least seven ground motions shall be analyzed and response parameters shall be based on larger of the average of the maximum response with

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ground motions applied as follows:

- 1. Each of the ground motions shall have their maximum component at the fundamental period aligned in one direction.
- 2. Each of the ground motion's maximum component shall be rotated orthogonal to the previous analysis direction.
- b) Where site is located more than 5 km from an active fault at least 10 ground motions shall be analyzed. The ground motions shall be applied such that one-half shall have their maximum component aligned in one direction and the other half aligned in the orthogonal direction. The average of the maximum response of all the analyses shall be used for design.

#### 1615A.1.30 ASCE 7, Section 16.2.4.1. Replace ASCE 7 exception to Section 16.2.3 by the following:

Where this standard requires the consideration of the load combinations with overstrength factor of Section 12.4.3.2, average demand from MCE analysis obtained from suite of analysis in accordance with Section 16.2.4 shall be used.

(Renumber rest of the sections for consistency)

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<u>1615A.1.40</u> <u>1615A.1.37</u> Earthquake Motion Measuring Instrumentation and Monitoring. [OSHPD 1 & 4] Modify ASCE 7 by the following:

**Scope:** For buildings with a Seismic Isolation System, a Damping System or a Lateral Force Resisting System (LFRS) not listed in ASCE 7 Table 12.2-1, earthquake motion measuring instrumentation and monitoring shall be required. <u>Monitoring requirements shall also apply to welded steel moment frame buildings constructed under a permit issued prior to October 25, 1994,</u>

**Instrumentation:** There shall be a sufficient number of instruments to characterize the response of the building during an earthquake and shall include at least one tri-axial free field instrument or equivalent. A proposal for instrumentation and equipment specifications shall be forwarded to the enforcement agency for review and approval. The owner of the building shall be responsible for the implementation of the instrumentation program. Maintenance of the instrumentation and removal /processing of the records shall be the responsibility of the enforcement agency.

**Monitoring:** After every significant seismic events, where the ground shaking acceleration at the site exceeds 0.3g, or the acceleration at any monitored building level exceeds 0.8g, as measured by the seismic monitoring system in the building, the owner shall retain a structural engineer to make an inspection of the structural system. The inspection shall include viewing the performance of the building, reviewing the strong motion records, and a visual examination of the isolators, dampers, and connections for deterioration, offset or physical damage. A report for each inspection, including conclusions on the continuing adequacy of the structural system, shall be submitted to the enforcement agency.

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CHAPTER 22A STEEL

SECTION 2201A GENERAL **2201***A***.1 Scope.** The provisions of this chapter govern the quality, design, fabrication and erection of steel used structurally in buildings or structures.

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#### 2205A.5 MODIFICATIONS TO AISC 358. [OSHPD 1 & 4]

2205A.5.1 2. Design Requirements, 2.1 Special and Intermediate Moment Frame Connection Types, Table 2-1 Prequalified Moment Connections modifications

The prequalified bolted moment connections, with bolts-(except erection bolts are permitted), are not permitted in buildings.

The prequalification of moment connections at orthogonal moment frames sharing common columns or moment connections attached to other than one side or two opposite sides of a column is not permitted by OSHPD.

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## CHAPTER 34 EXISTING STRUCTURES

#### SECTION 3401 GENERAL

**3401.1 Scope.** The provisions of this Chapter shall control the alteration, repair, addition and change of occupancy of existing structures.

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**3401.5** Adoption of ASCE 41: [OSHPD 2 & 3] All additions, alterations, repairs and seismic retrofit to the existing structures or portions thereof may be designed in accordance with the provisions of ASCE 41, as modified herein.

3401.5.1 Referenced Standards. All reference standards listed in ASCE 41 shall be replaced by referenced standards listed in Chapter 35 of this code and shall include all amendments to the reference standards in this code.

<u>3401.5.1</u> 3401.5.2 ASCE 41 Section 1.4 –Rehabilitation Objectives. Target building performance level shall be Life Safety (LS) Building Performance Level (3-C) as defined in Section 1.5.3.3 at Basic Safety Earthquake 1 (BSE-1) Seismic Hazard Level as defined in section 1.6.1.2 for Occupancy Category II Structures and Basic Safety Objective (BSO) Level as defined in Section 1.4.1 for Occupancy Category III Structures.

Occupancy Category IV structures shall satisfy Immediate Occupancy (IO) Building Performance Level of (1-B) as defined in Section 1.5.3.2 at Basic Safety Earthquake 1 (BSE-1) Seismic Hazard Level as defined in Section 1.6.1.2 and Collapse Prevention (CP) building performance level (5-E) per Section 1.5.3.4 at Basic Safety Earthquake 2 (BSE-2) Seismic Hazard Level as defined in Section 1.6.1.1.

<u>3401.5.2</u> <u>3401.5.3</u> **ASCE 41 Section 1.6 - Seismic Hazard.** - Response spectra and acceleration time histories shall be constructed in accordance with sections 1613 and 1803.7.

3401.5.3 3401.5.4 Analysis Procedure. The selection of a particular analysis procedure from ASCE 41 may be subject to the approval of the enforcement agent.

<u>3401.5.4</u> 3401.5.5 Structural Design Criteria. Prior to implementation of ASCE 41 non-linear dynamic procedures – the ground motion, analysis and design methods, material assumptions and acceptance criteria proposed by the engineer shall be reviewed by the enforcement agent.

<u>3401.5.5</u> <u>3401.5.6</u> Structural observation, testing, and inspections. Construction, testing, inspection, and structural observation requirements shall be as required for new construction.

#### SECTION 3402 DEFINITIONS

3402.1 Definitions.

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**RETROFIT** is the construction of any new element or system, or the alteration of any existing element or system required to bring an existing building, or portion thereof, conforming to earlier code requirements, into conformance with standards of the currently effective California Building Standards Code.

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## CHAPTER 34A EXISTING STRUCTURES

#### SECTION 3401A GENERAL

**3401***A.***1 Scope.** The provisions of this chapter shall control the alteration, repair, addition and change of occupancy of existing structures for applications listed in Sections 1.10.1 (OSHPD 1), and 1.10.4 (OSHPD 4) regulated by the Office of Statewide Health Planning and Development (OSHPD).

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## SECTION 3402A DEFINITIONS

**3402.A.1 Definitions.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in the code, have the meanings shown herein. *Definition provided in section 1613A.2, ASCE 7 Section 11.2 and ASCE 41 shall apply when appropriate in addition to terms defined in this section:* 

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GENERAL ACUTE CARE HOSPITAL as used in this chapter means a hospital building as defined in Section 129725 of the Health and Safety Code and that is also licensed pursuant to subdivision (a) of Section 1250 of the Health and Safety Code, but does not include these buildings if the beds licensed pursuant to subdivision (a) of Section 1250 of the Health and Safety Code, comprise 10 percent or less of the total licensed beds of the total physical plant, and does not include facilities owned or operated, or both, by the Department of Corrections. It also precludes hospital buildings that may be licensed under the above mentioned code sections, but provide skilled nursing, intermediate care, or acute psychiatric services only. See Section 1224.3.

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**RETROFIT** is the construction of any new element or system, or the alteration of any existing element or system required to bring an existing building, or portion thereof, conforming to earlier code requirements, into conformance with standards of the currently effective California Building Standards Code.

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#### SECTION 3403A ADDITIONS

**3403**<u>A</u>**.1 General.** Additions to any building or structure shall comply with the requirements of this code for new construction. Alterations to the existing building or structure shall be made to ensure that the existing building or structure together with the *addition* are no less conforming with the provisions of this code than the existing building or structure was prior to the *addition*. An existing building together with its additions shall comply with the height and area provisions of Chapter 5.

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**3403***A***.4 Existing structural elements carrying lateral load.** Where the *addition* is structurally independent of the *existing structure*, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the *addition* is not structurally independent of the *existing structure*, the *existing structure* and its *addition* acting together as a single structure shall be shown to meet the requirements of Sections 1609*A* and 1613*A*.

**Exception:** 1) Any existing lateral load-carrying structural element whose demand-capacity ratio with the *addition* considered is no more than 10 percent greater than its demand-capacity ratio with the *addition* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 and 1613 for purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction.

2) For incidental additions, drift limits based on original design code shall be permitted to be used in lieu of the drift limits required by ASCE 7.

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#### SECTION 3404A ALTERATIONS

**3404**<u>A</u>**.1 General.** Except as provided by this section, alterations to any building or structure shall comply with the requirements of the code for new construction. Alterations shall be such that the existing building or structure is no less conforming with the provisions of this code than the existing building or structure was prior to the *alteration*.

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**3404**<u>A</u>**.4** Existing structural elements carrying lateral load. Except as permitted by Section 3404<u>A</u>.5, where the *alteration* increases design lateral loads in accordance with Section 1609<u>A</u> or 1613<u>A</u>, or where the *alteration* results in a structural irregularity as defined in ASCE 7, or where the *alteration* decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall be shown to meet the requirements of Sections 1609A and 1613A.

**Exception:** 1) Any existing lateral load-carrying structural element whose demand-capacity ratio with the *alteration* considered is no more than 10 percent greater than its demand-capacity ratio with the *alteration* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces per Sections 1609A and 1613A. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces, and capacities shall account for the cumulative effects of additions and alterations since original construction.

2) For incidental alterations, drift limits based on original design code shall be permitted to be used in lieu of the drift limits required by ASCE 7.

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#### **SECTION 3411A**

ADDITIONS, ALTERATIONS, REPAIRS, AND SEISMIC RETROFIT TO EXISTING BUILDINGS OR STRUCTURES DESIGNED IN ACCORDANCE WITH PRE-1973 BUILDING CODE.

3411A.1 Seismic Retrofit. Any seismic retrofit of hospital building required by Article 2 or and Article 11, Chapter 6, Part 1, Title 24, shall meet the requirements of Section 3412A.2.

**EXCEPTION:** Hospital buildings evaluated to SPC 1 due to deficiencies identified by Article 10, Chapter 6, Part 1, Title 24, may be upgraded to SPC 2 by altering, repairing or seismically retrofitting these conditions in accordance with the requirements of Sections 3404A or 3412A.2.

3411A.2 Alterations, additions, and repairs to existing buildings or structures not required by Chapter 6, Part 1, Title 24.

3411A.1 3411A.2.1 General. Provisions of this section shall apply to hospital buildings which were originally designed to pre-1973 building code and not designated as SPC 3 or higher in accordance with Chapter 6, Part 1, Title 24.

3411A.2.2 Incidental structural alterations, additions or repairs. Incidental structural additions shall be permitted provided the additions meet this code for new construction using importance factor, I, equal to or greater than 1.0. Alterations or repairs to the existing affected lateral load-resisting elements shall meet the requirements of Sections 3404A or 3405A respectively.

3411A.1.1 3411A.2.3 Incidental and Minor structural alteration, additions, or repairs. Incidental and Minor structural additions shall be permitted provided the additions meet this code for new construction using importance factor, I, equal to or greater than 1.0. Alterations, or repair to existing gravity and lateral load-resisting systems shall be made to conform to the requirements of Sections 3404A or 3405A respectively using importance factor, I, equal to or greater than 1.0.

<u>3411A.1.2</u> <u>3411A.2.4</u> **Major structural alteration, additions or repairs.** Major structural alterations, additions, or repairs shall be in accordance with Sections 3403A, 3404A, or 3405A respectively.

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## SECTION 3412A COMPLIANCE ALTERNATIVES FOR ADDITIONS, ALTERATIONS, REPAIRS, AND SEISMIC RETROFIT TO EXISTING STRUCTURES

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**3412A.1 Adoption of ASCE 41.** Except for the modifications as set forth in Sections <u>3412A and</u> 3413A all additions, alterations, repairs and seismic retrofit to existing structures or portions thereof <u>shall be permitted to</u> be designed in accordance with the provisions of ASCE 41.

3412.A.1.1 Referenced Standards. All reference standards listed in ASCE 41 shall be replaced by referenced standards listed in Chapter 35 of this code and shall include all amendments to the reference standards in this code.

3412A.1.2 3412A.1.2 ASCE 41 Section 1.4 –Rehabilitation Objectives. Target building performance level shall be as follows:

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<u>3412A.1.2</u> <u>3412A.1.3</u> **Material Testing Required.** Use of material properties based on historical information as default values shall not be permitted.

<u>3412A.1.4</u> 3412A.1.4 Analysis Procedure. The selection of a particular analysis procedure from ASCE 41 shall be subject to the approval of the enforcement agent.

<u>3412A.1.4</u> <u>3412A.1.5</u> Structural Design Criteria. Prior to implementation of ASCE 41 Nonlinear Dynamic Procedure, the ground motion, analysis and design methods, material assumptions and acceptance criteria proposed by the engineer shall be reviewed by the enforcement agent.

<u>3412A.1.4</u> <u>3412A.1.6</u> **Structural observation, testing, and inspections.** Construction, testing, inspection, and structural observation requirements shall be as required for new construction.

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## SECTION 3413A MODIFICATIONS TO ASCE 41

3413A.1 GENERAL. The text of ASCE 41 shall be modified as indicated in Sections 3413A.1.1 through 3413A.1.32.

References in ASCE 41 shall comply with requirements of Sections 102.4.1 & 102.4.2.

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## <u>SECTION 3416A</u> <u>COMPLIANCE ALTERNATIVES</u> FOR SERVICES/SYSTEMS AND UTILITIES

3416A.1 GENERAL. Services/systems and utilities for conforming buildings and non-conforming buildings designated as SPC 3 or higher in accordance with Chapter 6, Part 1, Title 24 shall originate in and pass through a conforming building or non-conforming building designated as SPC 3 or higher, and NPC 4 or higher except as permitted by this section

#### (Followings are relocated from Section 1224.4.1)

<u>3416A.1.1</u> Services/systems and utilities. Services/systems and utilities that are necessary to the operation of an acute care hospital, skilled nursing facility, intermediate care facility, or correctional treatment center shall meet the structural requirements of this section. Examples of services/systems and utilities include normal power; emergency power; nurse call; fire alarm; communication and data systems; space-heating systems; process load systems; cooling systems; domestic hot and cold water systems; fire-suppression systems; building drain and sewer systems; and medical systems that support basic and supplemental services.

Services from an acute care hospital, skilled nursing facility or correctional treatment center may serve a <u>nonconforming</u> building that does not comply with the structural requirements of the 1973 edition or later edition of the California Building Standards Code with prior approval of the Office.

**Exception:** Remodel projects that use available existing services/systems and utilities are exempted from the requirements of this section. The enforcing agency may exempt minor addition, minor alteration, and minor remodel projects and projects to upgrade existing services/systems and utilities from the requirements of this section.

3416A.1.1.1 Services/systems and utilities for hospital buildings.

<u>3416A.1.1.1.1</u> Additions, alterations, and remodels of conforming (SPC-3, -4, or -5) hospital buildings. Services/systems and utilities for new buildings and additions, and alterations or remodels to existing conforming buildings shall originate in hospital buildings that have OSHPD-approved performance categories of SPC-3 or higher and NPC-4 or higher. The services/systems and utilities shall not pass through or under buildings that do not have OSHPD-approved performance categories of SPC-2 or higher and NPC-4 or higher.

#### Exceptions:

- 1. Remodel and alteration projects that use available existing services/systems and utilities are exempted from these requirements.
- 2. Services/systems and utilities may pass through or under buildings that have OSHPD-approved nonstructural performance categories of NPC-2 or NPC-3, provided that the services/systems and utilities feeding the new building addition, alteration, or remodel conform with ASCE 7, Chapter 13 as modified by Section 1615A and are deemed by OSHPD to be free of adverse seismic interactions caused by potential failure of overhead or adjacent components.

<u>3416A.1.1.1.2</u> Additions, alterations, and remodels of SPC-2 hospital buildings.
Services/systems and utilities for additions, alterations, or remodels of SPC-2 hospital buildings may originate in and pass through or under SPC-2 or better buildings that have an OSHPD-approved nonstructural performance category of NPC-3 or higher.

**Exception**: Services/systems and utilities may pass through or under buildings that have OSHPD-approved nonstructural performance categories of NPC-2, provided that the services/systems and utilities feeding the addition, alteration, or remodel conform with ASCE 7, Chapter 13 as modified by Section 1615A and are deemed by OSHPD to be free of adverse seismic interactions caused by potential failure of overhead or adjacent components.

<u>3416A.1.1.1.3</u> Alterations and remodels of SPC-1 hospital buildings. Services/systems and utilities for alterations or remodels of SPC-1 hospital buildings may originate in and pass through or under SPC-1 or better buildings that have an OSHPD-approved nonstructural performance category of NPC-2 or higher.

3416A.1.1.1.4 Buildings without SPC/NPC ratings. When services/systems and utilities for new buildings, additions, alterations, or remodels pass through or under hospital buildings which would not otherwise require evaluation for an SPC rating, such buildings shall be evaluated in accordance with the requirements of Section 1.3, Chapter 6, Part 1, California Administrative Code, to determine the appropriate ratings, or shall be shown to meet the structural requirements of these regulations for new hospital buildings. The services/systems and utilities feeding the new building addition, alteration, or remodel shall conform with ASCE 7, Chapter 13 as modified by Section 1615A and shall be deemed by OSHPD to be free of adverse seismic interactions caused by potential failure of overhead or adjacent components.

3416A.1.1.1.5 Buildings removed from acute-care hospital service. Services/systems and utilities for conforming acute care hospital buildings may pass through or under a building that has been removed from acute care hospital service until January 1, 2030 if the building removed from service remains under the jurisdiction of OSHPD and meets the performance requirements of Section 3416A.1.1.1.1. Services/systems and utilities for nonconforming acute care hospital buildings may pass through or under a building that has been removed from acute care hospital service only if the building removed from service remains under the jurisdiction of OSHPD and meets the performance requirements of Section 3416A.1.1.1.2.

**Exception**: Service/system and utilities for acute care hospital buildings may pass through or under buildings that have been removed from acute care service and which do not meet the performance requirements of Section <u>3416A.1.1.1.1</u> or Section <u>3416A.1.1.1.2</u>, provided all of the following are met:

1. The hospital has obtained an approved extension to the 2008 deadlines in accordance with Section 1.5.2, Article 1, Chapter 6 California Administrative Code.

- 2. The extensions request specifically includes a request to allow services/systems and utilities to pass through or under the building removed from acute care service. The services/systems and utilities may pass through or under the building for the duration of the extension.
- 3. The building removed from acute care service remains under the jurisdiction of OSHPD.

After January 1, 2030, services/systems and utilities for acute care hospital buildings shall not originate in or pass through or under a non-hospital building unless it has OSHPD-approved performance categories of SPC-3 or better and NPC-4 or better, and the non-hospital building remains under the jurisdiction of OSHPD.

<u>3416A.1.1.2</u> Services/systems and utilities for skilled nursing facilities, intermediate care facilities, and correctional treatment centers.

<u>3416A.1.1.2.1</u> New buildings and additions. Services/systems and utilities for new buildings and additions shall not originate in or pass through or under <u>nonconforming</u> structures. that do not comply with the structural requirements of the 1973 edition or later edition of the California Building Standards Code. The structures must be under the jurisdiction of OSHPD.

**Exception:** As an alternate to this section, skilled nursing and intermediate care facilities, and correctional treatment centers may meet the requirements in Section <u>3416A.1.1.1</u> for hospital buildings.

<u>3416A.1.1.2.2</u> Alterations and remodels. Services/systems and utilities for alterations or remodels of existing buildings may pass through <u>nonconforming</u> structures that do not comply with the structural requirements off the <u>1973 edition or later edition of the California Building Standards Code</u>, provided that the structure is under the jurisdiction of OSHPD, and the new services/systems and utilities passing through the buildings are anchored and braced for seismic forces in accordance with these regulations for new buildings and are free of adverse seismic interactions caused by potential failure of overhead or adjacent components.

#### <u>SECTION 3417A</u> <u>COMPLIANCE ALTERNATIVES</u> FOR MEANS OF EGRESS

3416A.1 GENERAL. Means of egress for conforming buildings and non-conforming buildings designated as SPC 3 or higher in accordance with Chapter 6, Part 1, Title 24 shall be in accordance with Chapter 10 and this section.

(Followings are relocated from Section 1003.1.1)

<u>3416A.1.1</u> Means of egress for hospitals, skilled nursing facilities, and intermediate care facilities. In addition to meeting the requirements of this chapter, means <u>Mean</u>s of egress for acute care hospitals, skilled nursing facilities, and intermediate-care facilities, or correctional treatment center shall comply with the requirements of this section. <del>Sections 1003.1.1.1 and 1003.1.1.2.</del>

**Exception:** The enforcing agency may exempt minor additions, minor alterations, and minor remodel projects from these requirements.

<u>3416A.1.1.1</u> **Means of egress for hospital buildings.** *[OSHPD 1]* Means of egress for hospital buildings shall comply with the requirements of Sections <u>3416A.1.1.1.1</u> through <u>3416A.1.1.1.6</u>.

<u>3416A.1.1.1.1</u> New and existing conforming hospital buildings. Means of egress for new hospital buildings and additions to existing conforming hospital buildings shall only pass through buildings that comply with the requirements of SPC-3 or higher and NPC-4 or higher.

<u>3416A.1.1.1.2</u> Existing SPC-2 hospital buildings. Means of egress for additions to existing SPC-2 hospital buildings shall only pass through hospital buildings that have OSHPD-approved performance

categories of SPC-2 or higher and NPC-4 or higher.

**Exception:** The means of egress may pass through hospital buildings that have OSHPD-approved performance categories of SPC-2 or higher and NPC-2 or higher, provided the nonstructural components in the path of egress are braced in accordance with the requirements of ASCE 7, Chapter 13 as modified by Section 1615A.

<u>3416A.1.1.1.3</u> Existing SPC-3 or higher hospital buildings. Means of egress for remodels of existing SPC-3 or higher hospital buildings shall only pass through hospital buildings that have OSHPD-approved performance categories of SPC-2 or higher and NPC-4 or higher

**Exception:** The means of egress may pass through hospital buildings that have OSHPD-approved performance categories of SPC-2 or higher and NPC-2 or higher, provided the nonstructural components in the path of egress are braced in accordance with the requirements of ASCE 7, Chapter 13 as modified by Section 1615A.

<u>3416A.1</u>.1.1.4 Existing SPC-1 and SPC-2 hospital buildings. Means of egress for remodels of existing SPC-1 and SPC-2 hospital buildings shall only pass through hospital buildings that have OSHPD-approved performance categories of SPC-1 or higher and NPC-2 or higher.

**Exception:** Means of egress for acute care service spaces for hospitals licensed pursuant to subdivision (a) of Section 1250 of the Health and Safety Code shall comply with the requirements of Section 3416A.1.1.2.

<u>3416A.1.1.1.5</u> Other non-conforming hospital buildings. Hospital buildings that would not otherwise require evaluation for an SPC rating, which are used as a part of the means of egress for acute care hospitals, shall be evaluated in accordance with the requirements of Section 1.3, Chapter 6, Part 1, CCR to determine the appropriate rating, or shall meet the structural requirements of these regulations for conforming hospital buildings. Means of egress shall be in accordance with requirements of Sections <u>3416A.1.1.1.1</u> through <u>3416A.1.1.1.4</u>.

<u>3416A.1.1.1.6</u> Buildings removed from hospital service. The means of egress for acute care hospitals may pass through buildings that are removed from hospital service only if the buildings remain under the jurisdiction of OSHPD, and only until January 1, 2030, subject to the following:

- Egress for conforming hospital buildings may pass through buildings that have been removed from acute care hospital service that comply with the requirements of Section <u>3416A.1.1.1.1</u> or <u>3416A.1.1.1.3</u>.
- Egress for nonconforming hospital buildings may pass through buildings that have been removed from acute care hospital service that comply with the requirements of Section <u>3416A.1.1.1.2</u> or 3416A.1.1.1.4.

After January 1, 2030, the means of egress for acute care hospital buildings shall only pass through hospital buildings that have OSHPD-approved performance categories of SPC 3 or higher and NPC 4 or higher.

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Notation:

Authority: Health and Safety Code Section 129850

Reference: Health and Safety Code Sections 1275 and 129850